DEVELOPMENT REVIEW BOARD REPORT

MEETING DATE: January 13, 2005 ITEM NO. 5

CASE NUMBER/ PROJECT NAME	**22-DR-2004** **AFL for Sprint WCF**
LOCATION	Cactus Road, west of the 105th Street alignment, which is east of the southeast corner of Cactus Rd. and 104th St.
REQUEST	Request approval to replace existing light pole with new light pole containing a concealed 3-sector wireless communication facility (WCF) antenna.

OWNER	City of Scottsdale 480-312-4327	ENGINEER	ISE (through Young Design Corp)
ARCHITECT/ DESIGNER	Young Design Corp Architects 480-451-9609	APPLICANT/ COORDINATOR	Scott Quinn Sprint/ A F L Telecommunications 602-318-8299

BACKGROUND

Zoning.
The site is zoned R1-35 PRD (Single Family Residential in a Planned Residential) Dist. This district permits Wireless Communication Facilities (WCF) on streetlights but requires DRB approval where the facilities are located within 150 ft. of properties used or likely to be used for residential purposes. Because of residential proximity this is a Type 3 WCF requiring DRB approval.

Context.
The site is within the Cactus Rd. right-of way and is situated adjacent to the Paradise Drive Estates community toward the south. Surrounding areas are also single-family residential with either R1-35 or R1-43 Dist. zoning. A 15 ft wide equestrian easement is situated located just south of Cactus Rd. on private lots.

APPLICANT'S PROPOSAL

Applicant's Request.
The request is for site plans and elevations approval to add a snug fit, Wireless Communication Facility (WCF) to a streetlight located within the Cactus Rd. right-of-way. The existing city streetlight will be replaced with a new 40 ft. tall streetlight containing a concealed 3-sector, antenna. The existing street light pole is 32 ft. tall with the street light arm and light reaching to 39 ft. in height. The proposed associated ground-mounted equipment is placed within the right-of-way near the base of the pole. The pole and antenna will be painted the same color to match the existing streetlights in the area. A proposed decorative iron, art screen feature and landscaping will help to buffer the equipment cabinet from the street and adjacent property. Neighbors have been contacted and no concerns have been expressed.

Development Information:

- Existing Use: City Streetlight
- Proposed Use: Streetlight with enclosed WCF antenna
- Existing Height: 32 ft. tall light pole, 39 ft. to top of light fixture
- Proposed Height: Top of antenna on light pole, 40 ft.
- Parcel Size: Located within Cactus Rd. Right-of-Way
- Distance to nearest Residential Property: 25 ft. more or less

KEY ISSUES

- A decorative art screen feature is proposed to shield the electrical equipment.
- The electrical equipment and street light used for the WCF are located in the Cactus Road right-of-way.

OTHER BOARDS AND COMMISSIONS

The city trails coordinator has requested that the WCF use not encroach into the equestrian easement situated south of Cactus road.

STAFF RECOMMENDATION

Staff recommends approval, subject to the attached stipulations.

STAFF CONTACT(S)

Al Ward
Senior Planner
Phone: 480-312-7067
E-mail: award@ScottsdaleAZ.gov

Randy Grant
Chief Planning Officer
Phone: 480-312-1995
E-mail: rgrant@ScottsdaleAZ.gov

ATTACHMENTS

1. Applicant Narrative
2. Context Aerial
2A. Aerial Close-Up
3. Zoning Map
4. Site Plan/Elevations
5. Photo Simulation
6. Decorative Screen
7. RF Compliance
A. Fire Ordinance Requirements
B. Stipulations/Zoning Ordinance Requirements

City of Scottsdale **PROJECT NARRATIVE**

1 STOP SHOP

22-DR-2004
3/30/04

- ☐ Rezoning
- ☐ Use Permit
- ☑ Development Review
- ☐ Master Sign Programs
- ☐ Variance
- ☐ Other

Case # _____, 36 -PA- 04

Project Name SPRINT PHOENIX 019

Location CACTUS/I-17 5TH "STREET" LIGHT

Applicant SCOTT QUINN

AFL TELECOMMUNICATIONS FOR SPRINT

SITE DETAILS

Proposed/Existing Zoning: RIGHT OF WAY
Use: STREET LIGHT
Parcel Size: ROW
☐ Gross Floor Area ☐ Total Units: NA
☐ Floor Area Ratio ☐ Density: NA

Parking Required: ROW
Parking Provided: ROW
Of Buildings: NA
Height: NA
Setbacks: N- ROW S-
E- W-

In the following space, please describe the project or the request

SEE ATTACHED + CITY STREET LIGHT POLE REPLACEMENT TO ACCOMODATE (3) CONCEALED SPRINT ANTENNAS. ASSOCIATED GROUND EQUIPMENT TO BE PLACED WITHIN CITY OF SCOTTSDALE RIGHT-OF-WAY AND SCREENED WITH EXISTING AND PROPOSED LANDSCAPING.

(If an additional page(s) is necessary, please attach.)

CD03251 (2/94)

AFL Telecommunications

ALCOA

Sprint. One Sprint. Many Solutions.

22-DR-2004
3/30/04

3/20/04

City of Scottsdale
Community Development
Alan Ward – Senior Planner
7447 E. Indian School Road
Scottsdale, AZ 85251

Re: Sprint, PH60XC019 "Light Pole" replacement at Cactus/~~105~~104th Street

Mr. Ward:

Sprint is proposing a wireless communication facility to be located at Cactus and 105th Street on City of Scottsdale Right-of-Way/Owned property. Three (3) communication antennas are to be concealed inside of a 40-foot city street light pole replacement. The associated ground equipment will be screened by existing and proposed landscape. The following is an outline of how Sprint with comply with all Federal, State, and Local Regulations with respect to wireless communication facilities:

Existing communication facilities within a 1-mile radius of the subject site did not exist and would not have met the coverage objective. Public utility poles lacked the available ground space needed, and or the appropriate height for the Radio Frequency signal. Other existing vertical elements were eliminated due to unwilling landlords, available height, ground space, zoning ordinance restrictions, etc. Sprint has no other existing site within the general area. This particular parcel was chosen due to existing vertical element and the ability to screen the antennas.

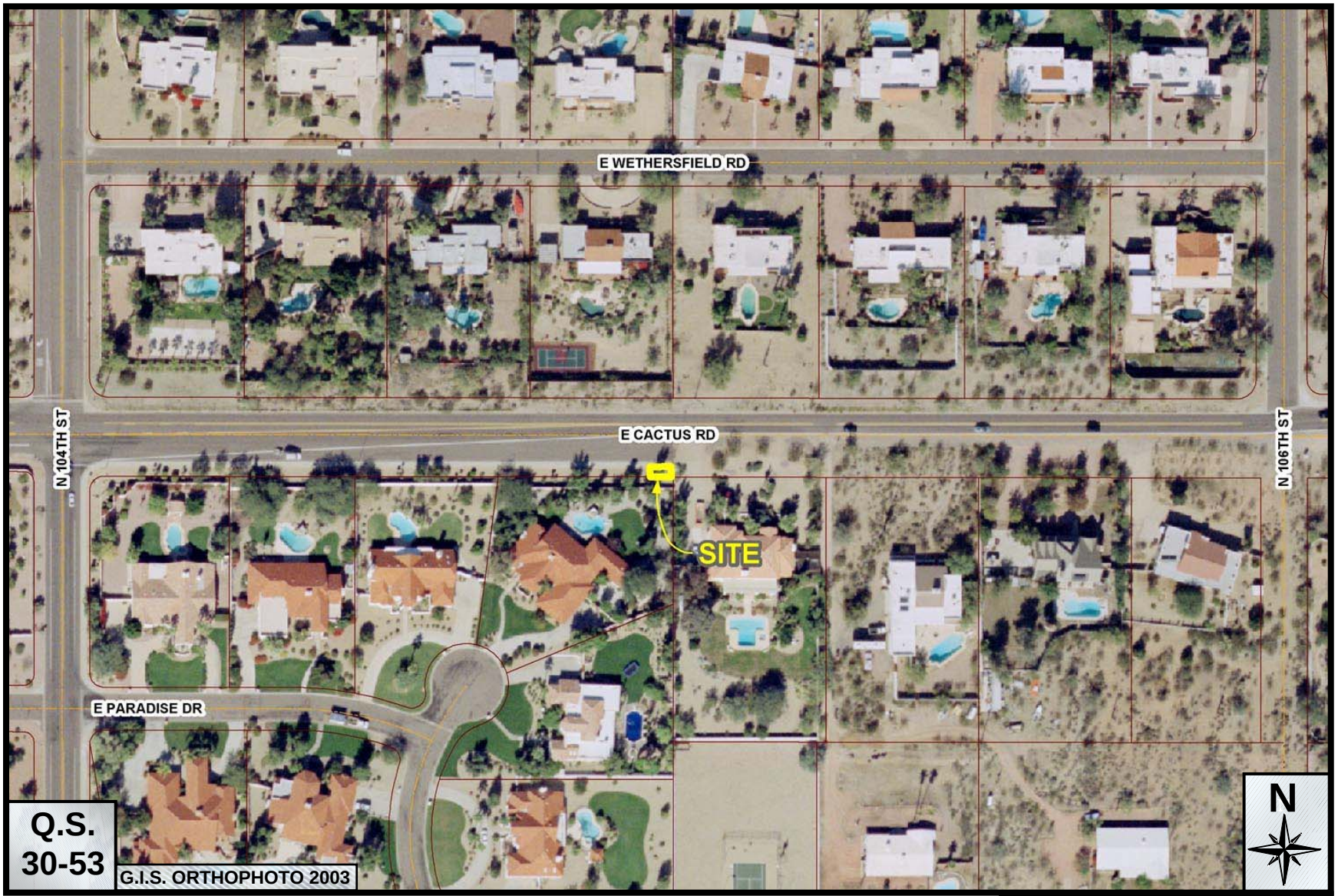
The proposed design is to be integration into a street light pole, and will be engineered certified to be in compliance with all zoning ordinances, Uniform Building, Electric, and Fire Codes. The proposed wireless communication facility will meet or exceed all Federal, State, Local Government agency requirements including the Federal Communication Commission (FCC) and the Radio Frequency (RF) exposure standards. As a result, the proposed project will be in compliance with all sections of the Scottsdale zoning ordinance requirements.

Sprint is excited about the opportunity to bring enhanced service to the greater Scottsdale area. As a result, residents and tourist will benefit from the improved coverage and options available. The improvements will only help to enhance E-911, City and Public communication services. The proposal should be looked at as an improvement for the immediate area. Therefore, it is the best interest of the City of Scottsdale to approve this particular Sprint proposal.

Please refer to the drawings for any further clarification.

Sincerely,

AFLTelecommunications/ALCOA - For *Sprint*
Scott Quinn - Land Use Planner
Member of the American Planning Association
1616 E. Indian School Rd, Suite 255, Phoenix AZ 85016
602-318-8299, scott.quinn@alcoa.com, Fax: 602-266-9553



Sprint WCF

(Cactus Rd. & 104th St.)

22-DR-2004

ATTACHMENT #2

Sprint WCF

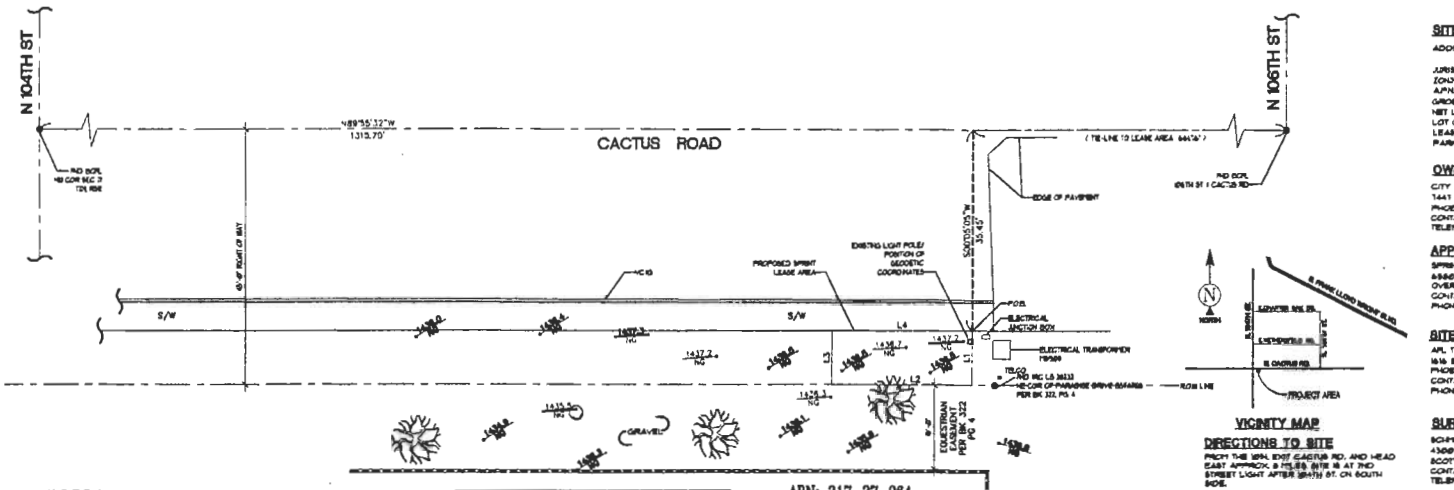
(Cactus Rd. & 104th St.)

22-DR-2004

ATTACHMENT #2A

22-DR-2004

ATTACHMENT #3

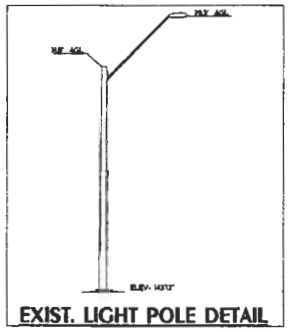


NORTH

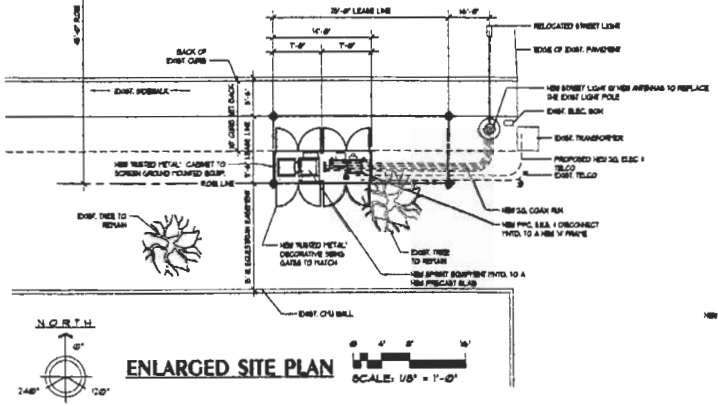
SITE PLAN

SCALE: 1" = 10'-0"

APN: 217-27-964
APN: 217-27-963
APN: 217-27-962
ZONING: R1-35



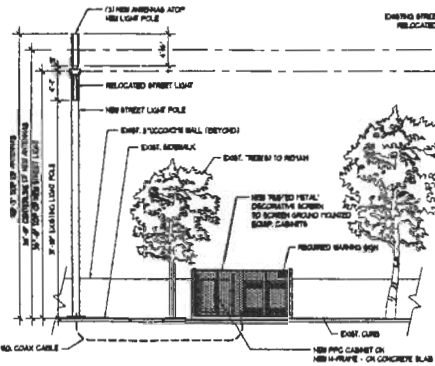
ANTENNA PLAN



NORTH

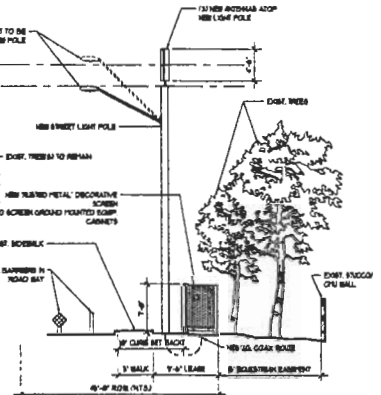
ENLARGED SITE PLAN

SCALE: 1/8" = 1'-0"



NORTH ELEVATION

SCALE: 1/8" = 1'-0"



WEST ELEVATION

SCALE: 1/8" = 1'-0"

VICINITY MAP

DIRECTIONS TO SITE

FROM THE 101H, EXIST CACTUS RD. AND HEAD EAST APPROX. 0.75 MI. SITE IS AT 2ND STREET LIGHT AFTER 104TH ST. ON SOUTH SIDE.

SITE DATA

ADDRESS: 10471 E. CACTUS SCOTTSDALE, AZ. 85258
JURISDICTION: CITY OF SCOTTSDALE
ZONING: R1-35
A.P.N.: CITY OF SCOTTSDALE R.O.W.
GROSS LEASE AREA: NO CHANGE
NET LOT AREA: NO CHANGE
LOT COVERAGE: NO CHANGE
LEASE AREA: 335 S.F.
PARKING REQUIRED: 0

OWNER

CITY OF SCOTTSDALE
7447 E. INDIAN SCHOOL RD.
PHOENIX, AZ. 85251
CONTACT: EVA BALLACE
TELEPHONE: (480) 312-7699

APPLICANT

SPRINT
6580 SPRINT PARKWAY
OVERLAND PARK, KS 66251
CONTACT: CHERI LUHARI
PHONE: (913) 221-1944

SITE ACQUISITION

AFL TELECOMMUNICATIONS
1616 E. INDIAN SCHOOL RD.
PHOENIX, AZ. 85014
CONTACT: DAVE RUSSE
PHONE: (602) 481-1964

SURVEYOR

SCHMIDT CONSULTING, INC.
4350 N. MILLER RD., SUITE 75
SCOTTSDALE, ARIZONA
CONTACT: ERICH SCHMIDT
TELEPHONE: (480) 874-1310

GENERAL NOTES

A. ANY LIGHTING WILL BE PLACED SO AS TO REFLECT THE LIGHT AWAY FROM ADJACENT RESIDENTIAL DISTRICTS. NO NOISE, ODOR OR VIBRATION WILL BE EMITTED SO THAT IT EXCEEDS THE GENERAL LEVEL OF NOISE, ODOR OR VIBRATION EMITTED BY USES OUTSIDE OF SITE.

B. DEVELOPMENT AND USE OF THIS SITE WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.

C. RADIATION FROM ANTENNAS SHALL NOT INTERFERE WITH EXISTING COMMUNICATIONS SITES.

PROJECT NARRATIVE

PROPOSED OUTDOOR EQUIPMENT MOUNTED TO A NEW CONCRETE SLAB. AN EXIST. STREET LIGHT IS TO BE REMOVED AND RE-INSTALLED WITH A PROPOSED NEW ST. STREET LIGHT W/ PROPOSED NEW ANTENNAS LOCATED AT THE TOP OF THE NEW LIGHT POLE

LEASE AREA LEGAL DESCRIPTION

THAT PART OF THE NORTHWEST QUARTER, OF THE NORTHWEST QUARTER, OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 3 NORTH, RANGE 5 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND BRASS CAP FLUSH, SAID POINT BEING THE CENTERLINE INTERSECTIONS OF NORTH 104TH STREET AND EAST CACTUS ROAD, SAID POINT BEING SOUTH 89 DEGREES 55 MINUTES 32 SECONDS EAST, AT A DISTANCE OF 313.70 FEET FROM A FOUND BRASS CAP FLUSH, SAID POINT BEING THE CENTERLINE OF NORTH 104TH STREET AND EAST CACTUS ROAD AND THE NORTH-WEST CORNER OF SAID SECTION 33;

THENCE NORTH 89 DEGREES 55 MINUTES 32 SECONDS WEST, A DISTANCE OF 0.00 FEET;
THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 35.00 FEET TO THE POINT OF BEGINNING;

THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 0.00 FEET;
THENCE NORTH 89 DEGREES 54 MINUTES 53 SECONDS WEST, A DISTANCE OF 25.00 FEET;
THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, A DISTANCE OF 0.00 FEET;
THENCE SOUTH 89 DEGREES 54 MINUTES 53 SECONDS EAST, A DISTANCE OF 25.00 FEET TO THE POINT OF BEGINNING.

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

AFL Telecommunications
WIRELESS SERVICES, INC.
1455 FRAZEE ROAD, SUITE 805
SAN DIEGO CALIFORNIA 92108
Office (619) 542-1717
Fax (619) 574-2500

young design corp
architecture / project management
10245 E. Via Linda, Scottsdale, AZ 85258
ph: 480 451 9609 fax: 480 451 9608
e mail: corporate@ydcoffice.com

PROJECT NO:	YDC-518
DRAWN BY:	MAY
CHECKED BY:	RCY
DRAWING DATE:	12/8/04

REV	DATE	DESCRIPTION
3	02/19/04	ZONING COMMENTS
4	03/29/04	CITY COMMENTS
5	06/01/04	CITY COMMENTS
6	10/7/04	CITY COMMENTS
7	10/14/04	CITY COMMENTS

APPROVAL BLOCK		
SPRINT RDF:		
SPRINT RF ENGINEER:		
SITE OWNER:		
DESCRIPTION	SIGNATURE	DATE

REGISTERED ARCHITECT — 19382 — RONALD C. YOUNG — ARIZONA

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STREET LIGHT
PH60XC019B
10471 E. CACTUS RD.
SCOTTSDALE, AZ. 85258
MARICOPA COUNTY

SHEET TITLE
ZONING PLAN

SHEET NUMBER
Z-1

ATTACHMENT #4

22-DR-2004

ATTACHMENT #5

Photo Simulation 22-DR-04

AFL Telecommunications

ALCOA

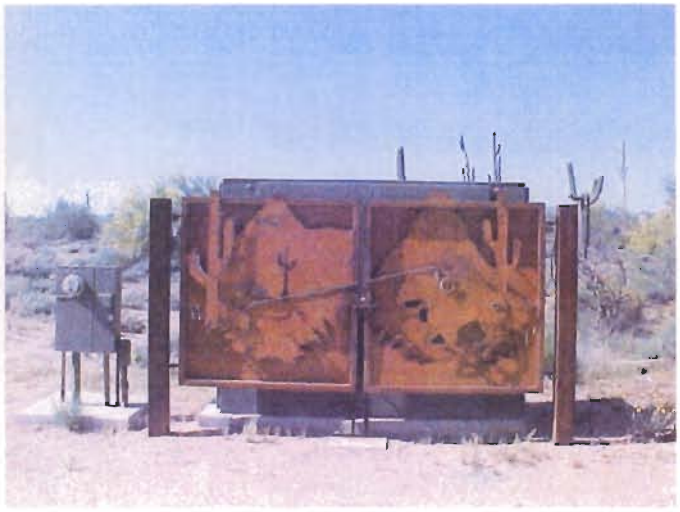
Sprint. One Sprint. Many Solutions.

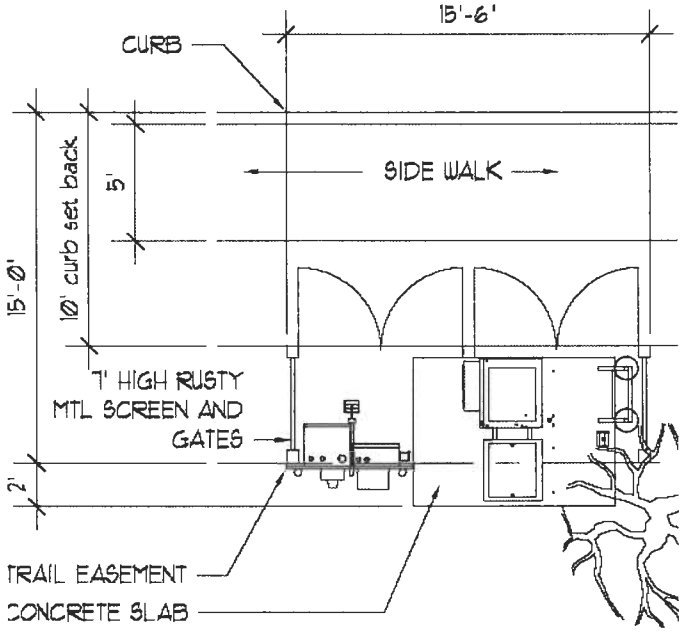
May 14, 2004

Roy McCleary
10470 E Paradise Drive
Scottsdale, AZ 85259

Mr. McCleary:

Thank you for the call regarding the proposed Sprint Cell Site at Cactus/105th Street. The following picture illustrates a similar type of design and material that will be used. The (2) Sprint cabinets are smaller than what is pictured and will not be seen above the gates. The meter on the left will also be placed out of view.





Sprint is excited about the opportunity to bring enhanced service to your area. As a result, residents and tourist will benefit from the improved coverage and options available. The improvements will help to enhance E-911, City and Public communication services. Therefore, Sprint is requesting your support for Case# 22-DR-2004.

Please feel free to contact me if you have any further questions.

AFLTelecommunications/ALCOA - For *Sprint*
Scott Quinn - Land Use Planner
1616 E. Indian School Rd, Suite 255, Phoenix AZ 85016
602-318-8299, scott.quinn@alcoa.com, Fax: 602-266-9553

22-DR-04

Sprint PCS - NEPA RF Compliance

15405 College Blvd., Lenexa, Kansas 66219 - Office (913) 890-2519 - Fax (913) 523-0436

Date: November 19, 2004

To: City of Scottsdale
7474 East Indian School Road
Scottsdale, AZ 85251

Attn: Mr. Al Ward

From: David Kirk

Site Address:	10471 East Cactus Road, Scottsdale, AZ 85251
Site Description:	stealth-other
Site Owner:	Sprint PCS

The purpose of this letter is to demonstrate compliance with FCC standards in regard to the electromagnetic emissions from the antennas located on the stealth-other at site PH60XC019 at the following address:

10471 East Cactus Road, Scottsdale, AZ 85251.

The FCC, in regulating electromagnetic radiation, applies a modified version of the standards developed by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers (IEEE) to include the NCRP standard for Specific Absorption Rate or SAR, for PCS bands. These standards, when converted over to the more familiar power density specification, set a maximum power density level for public areas at 1.00mW/cm^2 (milliwatts per square centimeter) for general population exposure and 5.00mW/cm^2 for occupational exposure. For a measure of safety, this level is set 50 times lower than levels the standards committees felt could potentially be harmful for constant exposure. PCS technology uses very low power transmitters especially when compared with TV and Radio broadcasting which can be hundreds of thousands of times more powerful than a PCS station.

Our antennas are designed to concentrate the majority of their signal power out of the front of the antenna in a very thin beam. Signal strength coming from the back of an antenna and from positions well below an antenna is typically hundreds of times lower than the signal in the main beam at the front of the antenna. Through software modeling techniques we can calculate the power density from a Sprint PCS installation at a variety of locations around the proposed site.

The site in this instance is a stealth-other installation using a 65 degree beam width antenna. Sprint PCS evaluates **all sites**, to determine the percent of exposure incurred by

ATTACHMENT #7

the general public as well as occupational exposure resulting from the operation of our antennas. This is an issue we take very seriously, and much effort and manpower goes into maintaining NEPA compliant sites. In addition to this, regular audits are conducted to ensure accuracy and completeness. We have developed several proprietary software programs exclusively used to determine Power Density levels and to compute Maximum Exposure limits. It is also our policy that when a site is changed in **any manner** that would impact exposure levels, a new analysis is performed. All data is saved and available to the FCC upon request.

The following contains information on the current FCC standards, the type of modeling Sprint PCS uses to ensure compliance to the standards, and the results of the study for this particular site.

Current FCC-adopted Exposure Limits

In FCC 96-326, the FCC adopted new exposure guidelines. The guidelines are given in terms of mW/cm^2 and the maximum limits are termed 'Maximum Permissible Exposure' (MPE) for both occupational and general cases. Because these guidelines are based upon the same SAR limits as those in the IEEE/ANSI and NCRP guidelines, they also include the safety factors of 10 and 50 for occupational and general public scenarios respectively.

The graph in Figure 1-1 shows the current FCC MPE guidelines. The two arrows indicate the cellular (~850 MHz) and PCS (~1900 MHz) frequencies. The exposure limits for PCS, expressed in terms of "power density", are 1.0 and $5.00 mW/cm^2$ for general public and occupational cases, respectively.

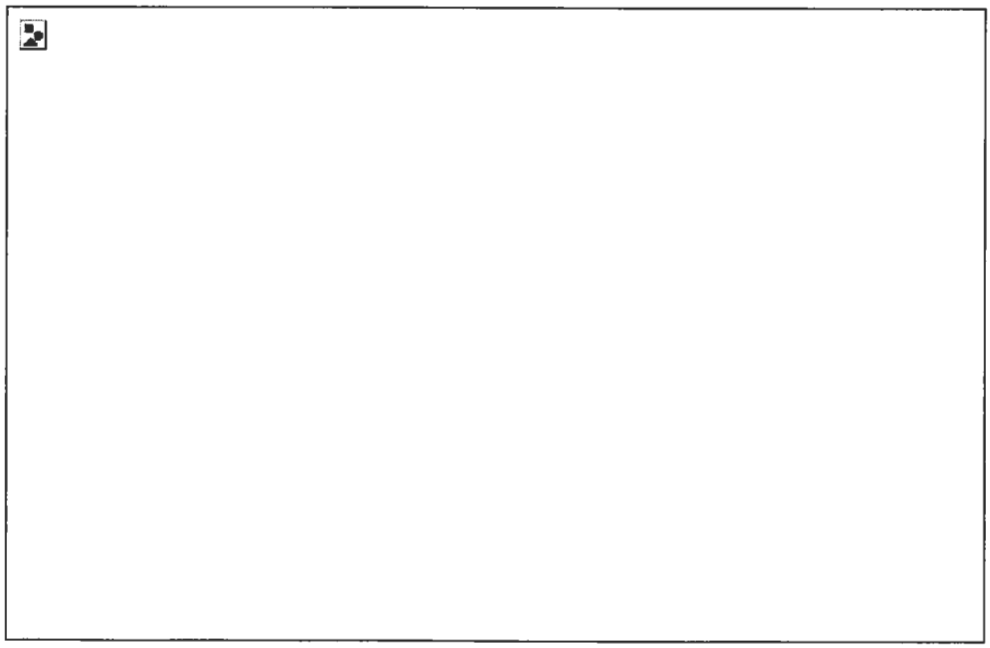


Figure 1-1: FCC Exposure Limits

Current FCC Rules/Regulations

The current regulations are contained in CFR Title 47, Sections 1.1307 and 1.1310. A brief summary of the current regulation is as follows:

In general, all facilities, operations and transmitters regulated by the Commission must comply with the exposure limits put forth in the NEPA rules of Title 47, Part 1, Section 1.1307 and 1.1310.

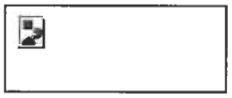
Applications to the Commission … must contain a statement confirming compliance with the limits unless … categorically excluded.

Technical information showing the basis for this statement must be submitted to the Commission upon request.

In the case of multiple fixed transmitters, any action necessary to bring the facility into compliance is the shared responsibility of all licensees whose transmitters contribute more than 5% of the exposure limit applicable to that transmitter.

Spherical Modeling

The concept of the spherical model is to assume that the EIRP of the actual antenna is being applied to a point source (true isotropic radiator). This is really only valid in the center of the main beam of the antenna but it guarantees a worst-case view everywhere else. The power density is then calculated by dividing the EIRP by the surface area of the sphere ($4?r^2$), for the distance **r** away from the antenna. In general, we will consider the shortest distance between the antenna and a six (6) foot area above the roof or ground where a person might stand. Additionally, we must multiply the EIRP by a power reflection coefficient to account for the fact that reflections from the roof or ground could add constructively with the incident wave at the point in question. The equation for power density is the following:



Where:

S is power density in mw/cm^2

EIRP is in watts

PRC is the power reflection coefficient (we will use 2.56 for most applications, as specified by the EPA)

R_d is the radius, direct distance from antenna (bottom) to point of interest, meters

Cylindrical Modeling

The concept of the cylindrical model is to take the power actually delivered to the antenna, Pt (NOT EIRP) and assume it is equally distributed over the surface of a cylinder of the same length as the antenna. If the antenna is a directional antenna then we reduce the surface area of the cylinder by BW/360 (BW is the 3-dB beam-width in degrees). This is a good near-field model. Additionally, if the antenna is mounted above the level, the average power density in a 6-foot tall area immediately above the rooftop level (or where a person might be standing or located), is reduced according to how far above/below the person is in relation to where the antenna is mounted.

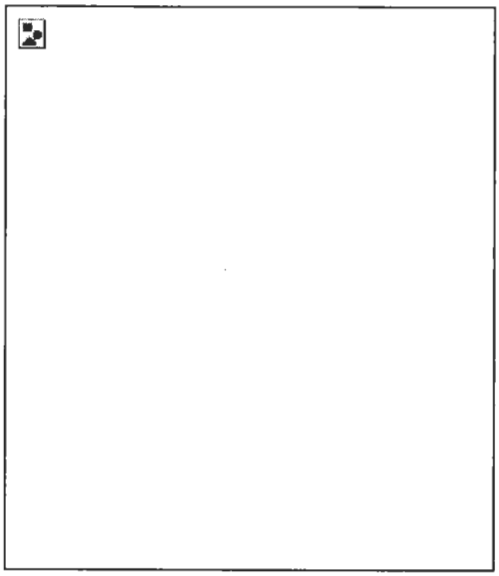
The equation for the power density is the following:

Where:

S	is the power density in mw/cm^2
P_t	is the actual (or worst case assumed) power delivered to the antenna, watts
$K(H_a,L_a)$	is the correction factor for antenna mounting height
H_a	is the antenna mounting height, feet
L_a	is the length of the antenna, meters
R_h	is the horizontal distance along roof from antenna to point of interest, meters
BW	is the 3-dB beam-width of antenna

$K(H_a,L_a)$	$0.99013-0.14656*H_a$	$0 <= H_a < 6$
	$0.17532-0.01076*H_a$	$6 <= H_a < 10$
	0.06772	$10 <= H_a$

$K(H_a,L_a)$ makes corrections for antennas mounted lower than the roof level and for antennas shorter than 6 feet.



Exposure Modeling

Using Spherical and Cylindrical Modeling, it is the policy of Sprint PCS to perform sufficient analysis on each site to assure that the above mentioned FCC Rules and Regulations are being met. Sprint PCS proprietary software is used to model RF exposure conditions on rooftops and in any other areas that our antennas are used. In this situation, the antennas are mounted on a stealth-other.

The following are a summary of the results obtained from our in-house modeling tools for this site:

Antenna #1: Front of Antenna

	Cylindrical Model		
Transmit Power		74.25	Watts
Frequency		1955	MHz
Antenna Height		0	Feet
Length of Antenna		4.29	Feet
Beam-width		65	Degrees
	General	**Occupational**	
Exposure Limit	1	5	mw/cm^2
Percent		**Distance**	
100%	11.7408	2.3482	Feet
50%	23.4817	4.6963	Feet

33%	35.2225	7.0445 Feet
5%	234.8169	46.9634 Feet

Figure 1-2: Result for PH60XC019 (Front of Antenna #1)

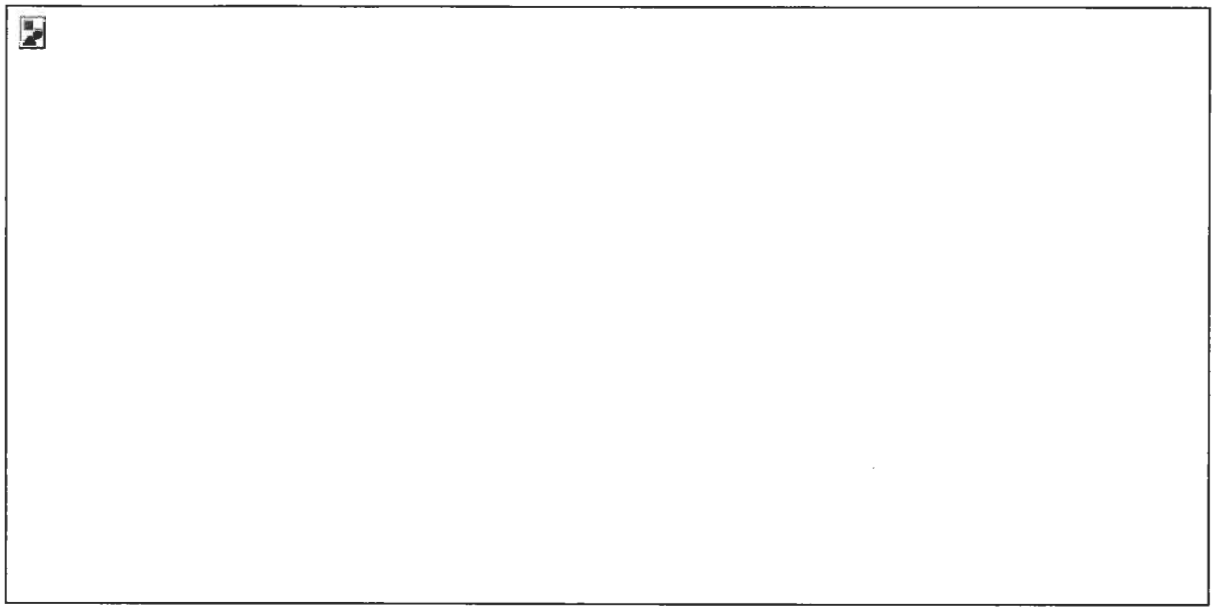


Figure 1-3: Percent of MPE vs. Horizontal Distance for PH60XC019 (Front of Antenna #1)

The results of the analysis show in Figure 1-3 that **to incur 100% of the Maximum Permissible Exposure levels an individual would have to be directly within 11.7408 feet of the front of the antenna in it's main beam.** This could only occur if an individual climbed in front of the antenna or placed a bucket truck less than **12 feet** from the front of the antenna. Figure 1-3 shows how rapidly the power density levels fall off (in percent of FCC maximum) as the distance increases.

Antenna #1: Back of Antenna

	Cylindrical Model		
Transmit Power		0.23	Watts
Frequency		1955	MHz
Antenna Height		0	Feet
Length of Antenna		4.29	Feet
Beam-width		65	Degrees
	General		**Occupational**
Exposure	1		5 mw/cm^2

Limit		
Percent		**Distance**
100%	0.0364	0.0073 Feet
50%	0.0728	0.0146 Feet
33%	0.1092	0.0218 Feet
5%	0.728	0.1456 Feet

Figure 1-4: Result for PH60XC019 (Back of Antenna #1)

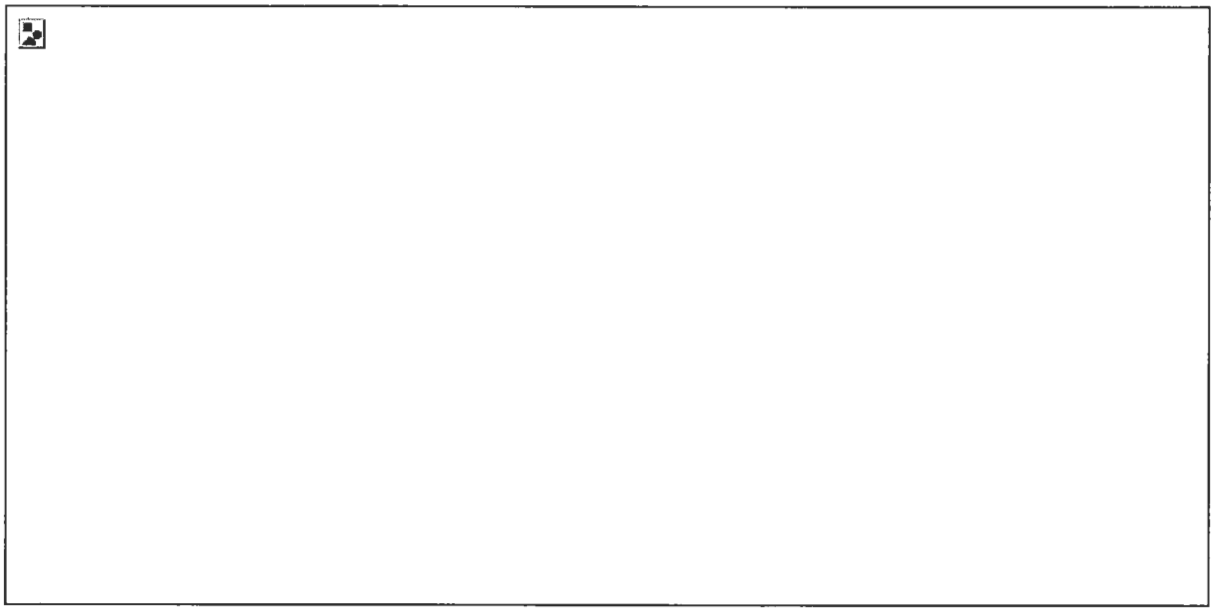


Figure 1-5: Percent of MPE vs. Horizontal Distance for PH60XC019 (Back of Antenna #1)

The results of Figure 1-5 show that **to incur 100% of the Maximum Permissible Exposure levels an individual would have to be directly within 0.0364 feet of the back of the antenna.** In other words, the person would have to be behind the antenna and closer than **0 inches.**

Maintenance Safeguards

Routine maintenance near the antennas is no cause for concern. If for some reason the antennas need to be moved or handled then the regional RF Manager at Sprint PCS should be notified or you may call at 1-888-859-1400 to facilitate a power down.

Summary

As can be seen from the data, these antennas are mounted on a stealth-other above ground level. An individual would have to come within less than **12 feet** of the front of Antenna

#1 (worst case) or within **0 inches** of the back of Antenna #1 to reach anywhere close to FCC maximum exposure limits. Since these antennas are mounted above ground level, with limited access, this is unlikely to occur.

Exposure to Radio Frequency Electromagnetic Fields is of great concern to Sprint PCS and we evaluate **all sites** for compliance to current FCC rules and regulations. We are continually striving to improve the quality of our modeling techniques through continuous improvement of our software tools and training procedures. We recognize our role as an industry leader to place the health and welfare of the public and occupational workers in high regard and we will continue to do so through mandatory modeling and measurements as required. We determine the hazard that is present and inform occupational workers through training and appropriate signage.

Please don't hesitate to call if you should have any questions or are in need of any further information regarding the RF emissions from this site.

Sincerely,

David Kirk

Sprint PCS, Regulatory Compliance

22 DR 2004 **DATE: 04-02-04**

SPRIT / AFT
TELECOMMUNICATION WFC
SEC. CACTUS RD. & 104TH. STREET
SCOTTSDALE, AZ.

FIRE ORDINANCE REQUIREMENTS

(INCORPORATE INTO BUILDING PLANS AS GENERAL NOTE BLOCK - USE ONLY THE DESIGNATED STIPULATIONS)

☐ **1. PREMISES INDENTIFICATION TO BE LEGIBLE FROM STREET OR DRIVE & MUST BE ON ALL PLANS.**

☐ **2. FIRE LANES & EMERGENCY ACCESS SHALL BE PROVIDED & MARKED IN COMPLIANCE WITH CITY ORDINANCE & IFC AT THE FOLLOWING LOCATIONS.**

_____
_____
_____

☐ **3. IT IS THE DEVELOPERS RESPONSIBILITY TO DETERMINE ULTIMATE COMPLIANCE WITH THE FAIR HOUSING ADMENDMENTS ACT & AMERICANS WITH DISABILITIES ACT & INCORPORATE SAME INTO THEIR BUILDING PLANS.**

☐ **4. SUBMIT PLANS & SPECS FOR SUPERVISED AUTOMATIC EXTINGUISHING SYSTEM FOR ALL COOKING APPLIANCES, HOOD PLENUMS & EXHAUST DUCTS.**

☐ **5. PROVIDE A KNOX ACCESS SYSTEM:**
- ☐ **A. KNOX BOX**
- ☐ **B. PADLOCK**
- ☐ **C. KNOX OVERRIDE & STROBE SWITCH FOR AUTOMATIC GATES.**

☐ **6. SUBMIT PLANS FOR A CLASS _____ FIRE ALARM SYSTEM PER SCOTTSDALE REVISED CODES.**

☐ **7. PROVIDE INTERIOR TENANT NOTIFICATION WHEN OFF-SITE MONITORING IS REQUIRED.**
(SEE FIRE ALARM INTERPRETATIONS FOR CLARIFICATION)

☐ **8. ADD 2-1/2" WET FIRE HOSE VALVES (NSHT) IF FLOOR AREA EXCEEDS 10,000 SQ. FT. PER FLOOR LEVEL AND/OR IF FIRE DEPT. ACCESS IS LIMITED TO LESS THAN 360°. _____**

☐ **9. BUILDINGS MAY BE SUBJECT TO INSTALLATION AND TESTING REQUIREMENTS FOR A PUBLIC SAFETY RADIO AMPLIFICATION SYSTEM.**

☐ **10. BACKFLOW PREVENTION WILL BE REQUIRED ON VERTICAL RISER(S) OF CLASS 1 & 2 FIRE SPRINKLER SYSTEMS PER SCOTTSDALE REVISED CODE.**

☐ **11. PROVIDE ALL WEATHER ACCESS ROAD (MIN. 20') TO ALL BUILDINGS & HYDRANTS FROM PUBLIC WAY DURING CONSTRUCTION.**

☐ **12. NUMBER OF FIRE HYDRANTS REQUIRED, _____. DEVELOPER SHALL HAVE THE REQUIRED HYDRANTS INSTALLED & OPERABLE PRIOR TO THE FOOTING INSPECTION. HYDRANTS SHALL BE SPACED AT A MAXIMUM OF _____AT_____GPM THE DEVELOPER SHALL MAKE THE C.O.S. APPROVED CIVIL WATER PLANS AVAILABLE TO THE FIRE SPRINKLER CONTRACTOR.**

☐ **13. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED. SEE SHEET(S) _____**

☐ **14. EXIT & EMERGENCY LIGHTING SHALL COMPLY WITH THE C.O.S. ORDINANCE & THE IFC. SEE SHEETS _____**

☐ **15. SUBMIT MSDS SHEETS & AGGREGATE QUANTITY FOR ALL HAZARDOUS MATERIALS INCLUDING FLAMMABLES, PESTICIDES, HERBICIDES, CORROSIVES, OXIDIZERS, ETC. PERMIT FOR ANY AMOUNT OF HAZARDOUS MATERIALS STORED, DISPENSED, USED OR HANDLED REQUIRES THAT A COMPLETED HMMP BE PROVIDED WITH SUBMITTAL OF BUILDING PLANS.**

☐ **16. FIRELINE, SPRINKLER & STANDPIPE SYSTEM SHALL BE FLUSHED & PRESSURE TESTED PER NFPA STANDARDS & SCOTTSDALE REVISED CODES.**

☐ **17. FDC SIAMESE CONNECTIONS FOR SPRINKLERS AND/OR STANDPIPES WILL BE LOCATED PER ORDINANCE AND/OR AT AN APPROVED LOCATION. MINIMUM SIZE 2-1/2 x 2-1/2 x _____(NSHT)**
- ☐ **4' TO 8' BACK OF CURB; INDEP. WET LINE.**
- ☐ **WALL MOUNTED - 15' CLEAR OF OPENINGS.**

☐ **18. THE FIRE LINE SHALL BE EXTENDED A MAXIMUM OF 3' INTO THE BUILDING WITH A MINIMUM OF ____ CLEARANCE AROUND THE FIRE RISER. EXTERIOR ACCESS MAY BE REQUIRED.**

ATTACHMENT A

19. ☐ **SPRINKLER SYSTEM SHALL BE INSTALLED TO COMPLY WITH MINIMUM NFPA CRITERIA (2002 EDITION) & CITY ORDINANCE. SYSTEMS WITH 100 HEADS OR MORE SHALL HAVE OFF-SITE MONITORING. AFTER BUILDING PLAN REVIEW, INSTALLING CONTRACTOR SHALL SUBMIT (3) THREE COMPLETE SETS OF DRAWINGS & HYDRAULIC CALCULATIONS REVIEWED BY A MINIMUM NICET III DESIGN TECHNICIAN.**

☐ **A. MODIFIED NFPA 13-D SYSTEM WITH RESIDENTIAL QUICK RESPONSE SPRINKLER HEADS (2002 EDITION)**

☐ **B. MODIFIED NFPA 13R SYSTEM (2002 EDITION) WITH RESIDENTIAL QUICK RESPONSE SPRINKLER HEADS IN DWELLING UNITS & ATTIC AREAS FED FROM SEPARATE FIRELINE PER C.O.S. ORDINANCE & INTERPRETATIONS & APPLICATIONS. CALCULATE UP TO FOUR REMOTE HEADS & 900 SQ FT MIN. IN ATTIC.**

☐ **C. NFPA (2002 EDITION) COMMERCIAL SYSTEM / DESIGN CRITERIA:**

☐ **D. THE FIRE SPRINKLER SYSTEM DESIGN FOR WAREHOUSE / STORAGE OCCUPANCIES SHALL BE BASED ON THE FULL HEIGHT CAPACITY OF THE BUILDING PER SCOTTSDALE REVISED CODE. DENSITY CRITERIA;**

☐ **E. SPRINKLER DESIGN CRITERIA FOR UNSPECIFIED WAREHOUSE COMMODITIES: .45 OVER 3000 SQ. FT.**

☐ **F. THE PROJECT SPECIFICATIONS SHALL BE SUBMITTED WITH CONTRACT DRAWINGS.**

☒ **G. NO FIRE DEPARTMENT RQUIREMENTS AT THIS TIME. -**

Submit three (3) complete sets of drawings submitted by installing contractor, after building plan review is complete. Please refer questions to Fire Dept. Plan Review, 312-7070, 312-7684, 312-7127, 312-2372.

Stipulations for Case:
Sprint/AFL Telecommunications PH60XCO19A WCF
22-DR-2004

Unless otherwise stated, the applicant agrees to complete all requirements prior to final plan approval, to the satisfaction of Project Coordinator and the Final Plans staff.

PLANNING

APPLICABLE DOCUMENTS AND PLANS:

DRB Stipulations

1. Except as required by the City Code of Ordinances, Zoning Regulations, Subdivision Regulations, and the other stipulations herein, the site design and construction shall substantially conform to the following documents:
2. Architectural elements, including dimensions, materials, form, color, and texture, shall be constructed to be consistent with the building elevations submitted by Young Design Corp. with a date of 12-6-2004.
3. The location and configuration of all site improvements shall be constructed to be consistent with the site plan submitted by Young Design Corp. with a date of 12-6-2004.
4. Location of the streetlight, ground mounted equipment and related wiring shall be located within the Cactus Rd. right-of-way.

ARCHITECTURAL DESIGN:

DRB Stipulations

5. With the final plans submittal, the applicant shall submit a revised site plan that relocates all WCF ground mounted equipment outside of the sight distance visibility triangle. The plans shall also show the sight distance visibility triangle location per Figure 3.1-14 of the Design Standards and Policies Manual.
6. With the final plans submittal, the applicant shall submit a plan to verify that ground mounted equipment 10 feet from the back of curb/bike lane along Cactus Road, to the satisfaction of City staff.
7. The wireless communication facility antenna, mounting brackets and hardware shall be painted to match the color of the light pole.
8. Prior to any construction, the contractor is required to notify the City of Scottsdale Street Light Supervisor regarding relocation, pole configuration and the work schedule by calling 480-312-7067. A note stating this requirement must be placed on the final plans construction drawings.
9. Prior to any construction, the contractor is required to notify Inspection Services by calling 480-391-5750. A Planning Inspection (#42) must be conducted prior to commencement of any construction. A note stating this requirement must be placed on the final plans construction drawings.
10. With the final plans submittal, the Wireless Provider shall submit a completed Permission for Improvements in the Right-of-Way document, to the satisfaction of City staff.
11. Developer shall provide a new, “rusted metal” decorative screen around each of the 4 sides, to screen the ground mounted equipment, to the satisfaction of City staff.
12. All existing public right-of-way and easements shall be shown on all final plans.
13. Provider shall identify telephone and electrical sources and show detailed connections on final plans.
14. The provider shall provide details of the light pole connections and transition from the pole to the equipment cabinets, to the satisfaction of the Street Light Supervisor for the City of Scottsdale.

15. The provider shall submit details showing that the coaxial cable and all cable are to remain within the traffic signal standard and that all cables and coaxial cable between the signal pole and the equipment shall be completely underground.
16. With the final plans submittal, the provider shall submit dimensioned and scaled details and/or manufacturer cutsheets of the antennas being used. Any changes, including but not limited to the size and location of the proposed antennas shall be subject to further review and approval of the Planning and Development Services department.
17. With the final plans submittal, the provider shall submit details of the equipment boxes, including the size (cu. ft.), height, color and other dimensions, to the satisfaction of City staff.
18. No microwave dish is approved as part of case 22-DR-2004.
19. With the final plans submittal, the applicant shall provide a detail of the required facility marker or plaque, showing conformance with ordinance requirements. The location of the plaque shall clearly be shown on the site plan and elevations.
20. Modify site plans and elevations where required, to read the correct scale.
21. Clearly differentiate between the sidewalk and bike path on the site plan.
22. Provide a dimension to the top of the antennas on the light pole.
23. Prior to the final plans submittal, the applicant shall submit to the satisfaction of the Project Coordination Manager, a full written RF report verifying that at it's maximum load, the wireless communication facility was tested and certified to meet or exceed the FCC's radio frequency safety standards. This report shall be updated every 3 years.

EXTERIOR LIGHTING DESIGN:

DRB Stipulations

24. No exterior lighting is approved as part of this case.